AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

Claim 1 (Currently Amended): A method of decreasing the level of tissue plasminogen activator (t-PA) antigen in a human subject, the method comprising:

providing a sample from the subject, wherein said sample comprises a nucleic acid or protein from the subject,

detecting identifying at least one 4G allele and/or genotype at the a plasminogen activator inhibitor-1 (PAI-1) gene promoter site in the human subject sample, and

engaging advising the human subject to engage in exercise training for a period of time sufficient to decrease the level of t-PA antigen.

Claim 2 (Original): The method of claim 1, wherein the subject has a 4G/5G genotype.

Claim 3 (Original): The method of claim 1, wherein the subject has a 4G/4G genotype.

Claim 4 (Original): The method of claim 1, wherein the exercise training comprises extensive exercise.

Claim 5 (Original): The method of claim 1, wherein the exercise training comprises moderate exercise.

Claim 6 (Original): The method of claim 1, wherein the exercise training comprises limited exercise.

Claim 7 (Currently Amended) A method of preventing cardiovascular disease in a human subject, the method comprising:

providing a sample from the subject, the sample comprising a nucleic acid or

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protein from the human subject,

detecting identifying at least one 4G allele and/or genotype at the a plasminogen activator inhibitor-1 (PAI-1) gene promoter site in the human subject sample, and

engaging advising the subject to engage in exercise training for a period of time sufficient to decrease the level of tissue plasminogen activator (t-PA) antigen.

Claim 8 (Previously Presented):

The method of claim 7, wherein the subject

has a 4G/5G genotype.

Claim 9 (Previously Presented):

The method of claim 7, wherein the subject

has a 4G/4G genotype.

Claim 10 (Previously Presented):

The method of claim 7, wherein the exercise

training comprises extensive exercise.

Claim 11 (Previously Presented):

The method of claim 7, wherein the exercise

training comprises moderate exercise.

Claim 12 (Previously Presented):

The method of claim 7, wherein the exercise

training comprises limited exercise.

Claim 13 (Currently Amended): A method of ameliorating cardiovascular disease in a human subject suffering from cardiovascular disease, the method comprising:

providing a sample containing a nucleic acid or protein from the human subject. detecting identifying at least one 4G allele and/or genotype at the a plasminogen

activator inhibitor-1 (PAI-1) gene promoter site in the human subject sample, and

engaging advising the subject to engage in exercise training for a period of time sufficient to decrease the level of tissue plasminogen activator (t-PA) antigen.

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Claim 14 (Previously Presented): The method of claim 13, wherein the subject has a 4G/5G genotype.

Claim 15 (Previously Presented): The method of claim 13, wherein the subject has a 4G/4G genotype.

Claim 16 (Previously Presented): The method of claim 13, wherein the exercise training comprises extensive exercise.

Claim 17 (Previously Presented): The method of claim 13, wherein the exercise training comprises moderate exercise.

Claim 18 (Previously Presented): The method of claim 13, wherein the exercise training comprises limited exercise.

Claims 19 and 20 (Cancelled).

Claim 21 (Withdrawn): A method of increasing fibrinolysis levels in a subject, the method comprising:

identifying a subject with at least one I allele and/or genotype at the (t-PA) gene locus; and

engaging the subject in exercise training for a period of time sufficient to increase fibrinolysis in the subject.

Claim 22 (Withdrawn): The method of claim 21, wherein the subject has a I/I genotype.

Claim 23 (Withdrawn): The method of claim 21 wherein the subject has a I/D genotype.

Claim 24 (Withdrawn): The method of claim 21, wherein the exercise training comprises extensive exercise.

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Claim 25 (Withdrawn): The method of claim 21, wherein the exercise training comprises moderate exercise.

Claim 26 (Withdrawn): The method of claim 19, wherein the exercise training comprises limited exercise.

Claim 27 (Withdrawn): A method of preventing or ameliorating cardiovascular disease in a subject, the method comprising:

identifying a subject with at least one I allele and/or genotype at the (t-PA) gene locus; and

engaging the subject in exercise training for a period of time sufficient to prevent cardiovascular disease in the subject.

Claim 28 (Currently Amended): A method of increasing the level of tissue plasminogen activator (t-PA) activity in a human subject, the method comprising:

providing a sample from the subject, wherein the sample comprises a nucleic acid or protein from the subject,

<u>detecting_identifying_two_4G_alleles_and/or_genotype_at_the_a_plasminogen_activator_inhibitor-1 (PAI-1) gene promoter site in the human subject_sample, and activator_inhibitor-1 (PAI-1) gene promoter site in the human subject_sample.</u>

engaging advising the human subject to engage in exercise training for a period of time sufficient to increase the level of t-PA activity.

Claim 29 (Previously Presented): The method according to claim 28, wherein the human subject suffers from cardiovascular disease, and wherein the exercise training is sufficient to ameliorate symptoms of cardiovascular disease in the human subject.